

## REMARKS

Claims 21-24 are pending.

Claim 21 and 22 are amended. No new subject matter is added. It is believed that the amendment places the application in condition for allowance.

Reconsideration of the pending claims is respectfully requested in light of the following remarks.

### *35 USC §102 Rejections*

Claim 21 stands rejected under 35 USC §102(e) as being anticipated by US Patent No. 6,396,092 to Takatani et al (Takatani). The applicant disagrees for the following reason.

In Paper No. 8, page 6, section 8, the Examiner explicitly stated that the claimed buried contact structure is shown by Takatani as element 32 of FIG. 7 (emphasis added). However, in the Office Action mailed on October 16, 2002 (Paper No. 6, page 3, section 6) the Examiner explicitly stated that Takatani teaches “a ferroelectric capacitor electrically connected to the buried contact structure 52 (figs. 8-10) through a second contact hole” (emphasis added). Regardless of what the Examiner meant (or seemed to mean), Takatani still does not teach every element of claim 21.

If element 52 of Takatani FIGS. 8-10 is equivalent to the claimed buried contact structure, then the Examiner has already agreed (Paper No. 8, page 6, section 8) that Takatani’s “blocking layer” 41 is not formed on the “buried contact structure” 52.

On the other hand, if element 32 of Takatani FIG. 7 is equivalent to the claimed buried contact structure, then the claim 21 limitation that recites a ferroelectric capacitor that fills a second contact hole and connects to the buried contact structure through the second contact hole is not disclosed. The applicant wishes to point out that elements 62, 63, and 64 of Takatani's FIG. 9 together form a capacitor of a memory cell (see column 9, line 51 to column 10, line 1). No part of Takatani’s capacitor (elements 62, 63, and 64) fills a second contact hole as recited in claim 21. No part of Takatani’s capacitor (elements 62, 63, and 64) is connected to the “buried contact structure” 32 through the second contact hole as recited in claim 21. The applicant agrees that Takatani's conductive layer 52 fills a second contact hole, but this conductive layer 52 is not a part of Takatani's capacitor, and its presence makes it impossible for Takatani's capacitor (elements 62, 63, and 64) to connect to the “buried contact structure” 32 through the second contact hole, as recited in claim 21.

### **35 USC § 103 Rejections**

Claims 21 and 23 stand rejected under 35 USC §103(a) as being unpatentable over US Patent No. 6,040,596 to Choi, et al. (Choi) in view of US Patent No. 5,411,911 to Ikeda, et al. (Ikeda). The applicant disagrees for the following reason.

Claim 21 recites, in part, a buried contact structure connected to the substrate through a first contact hole extending through the first interlayer insulating layer, the buried contact structure formed on the first interlayer insulating layer.

The Examiner previously stated in Paper 8 (see pages 3-4, section 8) that the first interlayer insulating layer is shown by Choi's element 26 (FIG. 3A), that the buried contact structure and the first contact hole are shown by Choi's element 22 (FIG. 3A), and that Choi's conductive layer 34 fills a second contact hole connected to the buried contact structure 22 (FIG. 3A).

The applicant wishes to point out that Choi's "buried contact structure" 22 is not formed on the "first interlayer insulating layer" 26 as recited in claim 21 (see FIG. 3A). Neither does Choi's "first contact hole" 22 extend through the "first interlayer insulating layer" 26 as recited in claim 21 (see FIG. 3A).

Consequently, regardless of what Ikeda teaches, the combination of Choi and Ikeda fails to disclose all elements of claim 21 and a *prima facie* case is not established.

Claim 23 is patentable for at least the same reason as claim 21.

Claim 22 stands rejected under 35 USC §103(a) as being unpatentable over Choi in view of US Patent No. 6,251,726 to Huang (Huang). The applicant disagrees for the same reason presented above with respect to the Choi/Ikeda combination. Choi still fails to disclose a buried contact structure formed on the first interlayer insulating layer or a first contact hole that extends through the first interlayer insulating layer.

Consequently, even if Huang may be said to teach what the Examiner suggests, the Choi/Huang combination fails to disclose all the elements present in claim 22, and a *prima facie* case of obviousness is not established.

Claim 24 stands rejected under 35 USC 103(a) as being unpatentable over Choi in view of US Patent Application Publication No. US 2002/0011615 by Nagata, et al.(Nagata). The applicant disagrees for the same reason presented above with regard to the Choi/Ikeda combination. Choi fails to disclose all elements of claim 21, thus the Choi/Nagata

combination fails to disclose all elements present in claim 24 and a *prima facie* case of obviousness is not established.

For the foregoing reasons, reconsideration and allowance of claims 21-24 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.



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